

Physical Preparation

Hurricanes U17 Rugby Camp
2017

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The Dirt!

1. What type of training should my child be doing?
 2. Is resistance training ok?
 3. Should he be taking supplements?
 4. Injury prevention
 5. Prepping to play
- Question/Answer



Physical Attributes (Hurricane)



FAST & AGILE



SUPER FIT



GREAT



SIZE



& POWERFUL



What type of training should my child be doing?

Timeline



Movement competency

Body composition

Strength

Power (high velocity)

Aerobic conditioning focus

Anaerobic Focus



CASE STUDY

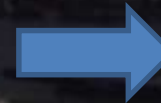
ASAFO AUMUA



2015 (U18)



2016 (U19)



2017 (U20)

BW: 100kgs

SF: 115mm

YoYo: 17.3

10m: 1.75s

20m: 3.01s

Bench: N/A

Squat: N/A

Basic Training

Technique/Body Comp

BW: 110kgs

SF: 110mm

YoYo: 17.4

10m: 1.71s

20m: 2.93s

Bench: 130kgs

Squat: 185kgs

Intermediate Training

Strength Focus

BW: 108kgs

SF: 75mm

YoYo: 18.3

10m: 1.69s

20m: 2.90s

Bench: 170kgs

Squat: 210kgs

Advanced training

Power Focus

Is resistance training ok?

Is strength training safe for youth (15-18yrs)?

- There is an abundance of evidence that shows resistance training is safe & effective when:
 - 1) Programs are designed and **delivered** by a qualified strength & conditioning coach. **Builder example**
 - 2) A progressive approach is taken i.e. Body weight → 15RM → 6RM
 - 3) Technique is **KEY** and is the primary focus of any programme at this age.
We shouldn't be loading dysfunctional movement patterns.



Is resistance training ok?

Will strength training stunt my child's growth?

- No evidence exists that indicates a reduced stature in children who regularly strength train in a supervised environment

Weight-bearing physical activity actually has a positive influence on growth at any time during development. [Hop-sotch example](#)

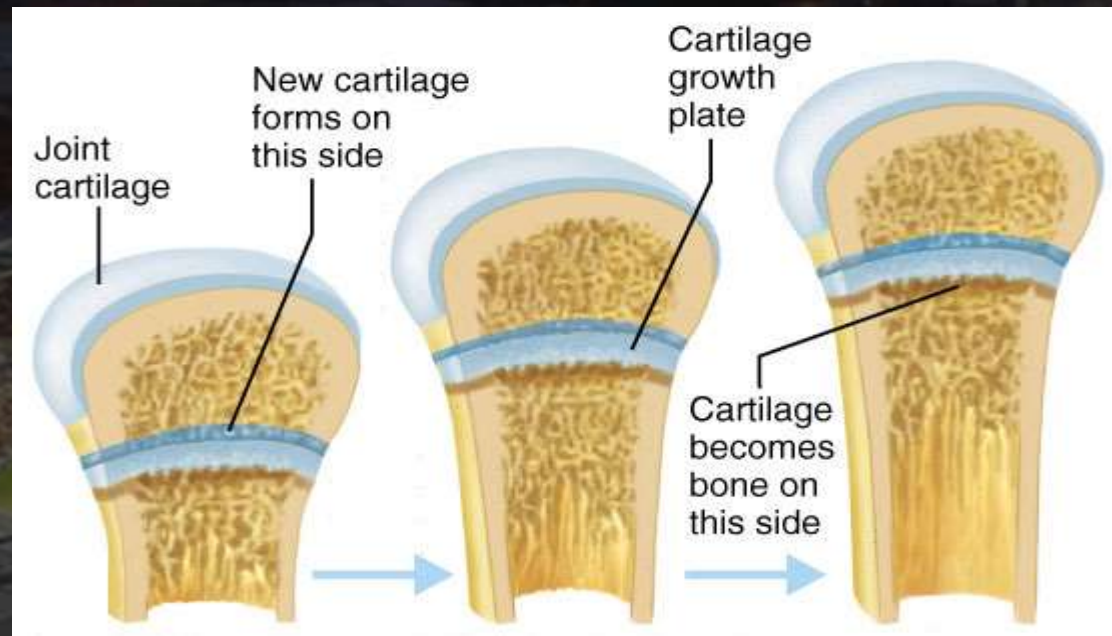
Plyometric 1	Box Drop & Absorb	Box Jump Up	S/L Box Jump Up	Hurdle Hop & Stick	Continuous Hurdle Hops
Plyometric 2	S/L Bound & Stick (2 leg landing)	S/L Bound & Stick (1 leg landing)	Bound & Stick	G/A Bound & Stick	Continuous Bounds
Plyometric 3	Explosive Push Up	S/A MB Shot Put	MB Rotational Throw	Lying MB Throw	S/A Lying MB Throw



Is resistance training ok?

Will my child experience growth plate damage as a result of strength training?

- No growth plate fracture has ever been reported in any research that was appropriately supervised and designed



Is resistance training ok?

What are the benefits?

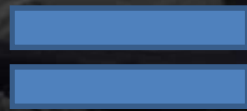
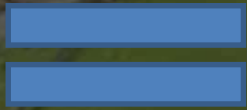
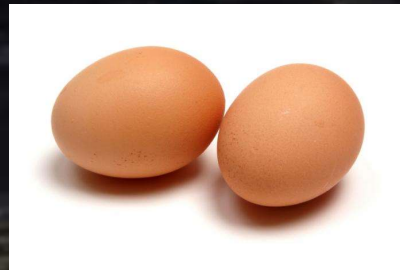
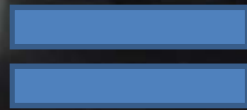
- ↑ mobility and balance
- ↑ posture
- ↑ coordination
- ↑ bone density
- ↑ cognition and stamina
- ↑ lean muscle mass
- ↑ body composition
- ↑ strength
- ↑ endurance
- ↑ self-esteem
- ↓ muscle imbalances
- ↓ chance of developing certain disease

= Improved performance & decreased injury risk



Should he be taking supplements?

Supplements are designed to supplement your diet, if your diet is Food first approach, you have nothing to supplement.

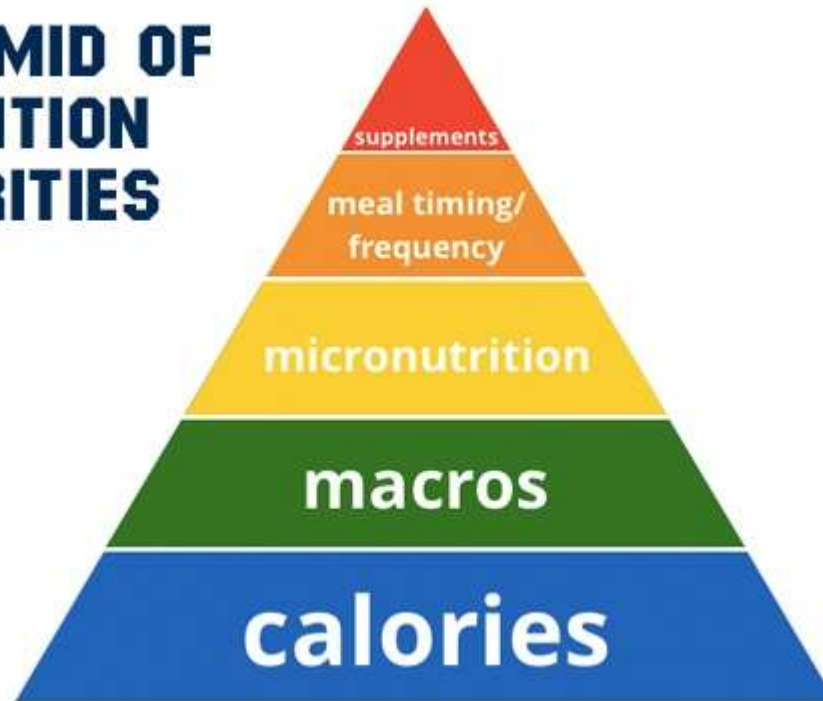


Should he be taking supplements?

Personal View: Stay well away! Food first...

Focus

PYRAMID OF NUTRITION PRIORITIES



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- **Bann**
game!

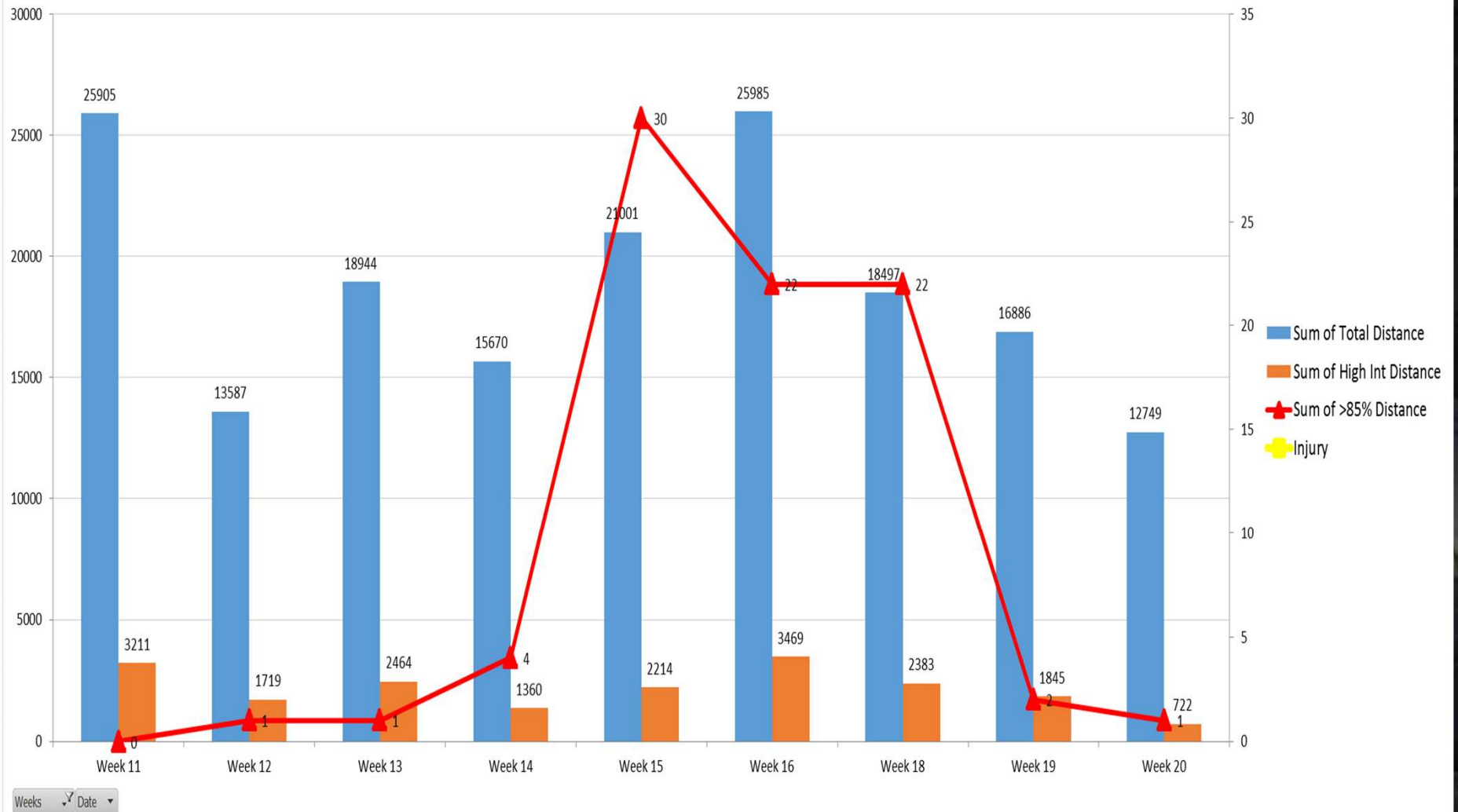
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- For further information visit www.drugfreesport.org.nz

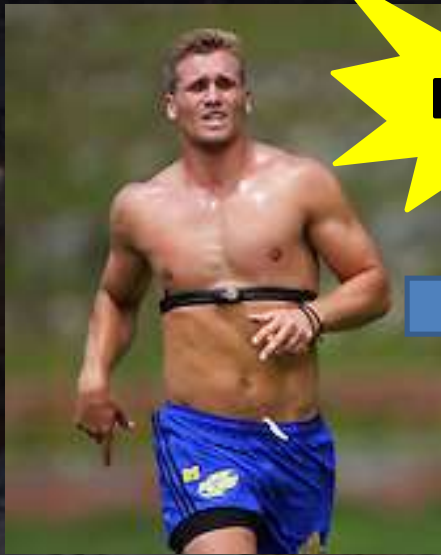


Injury Prevention

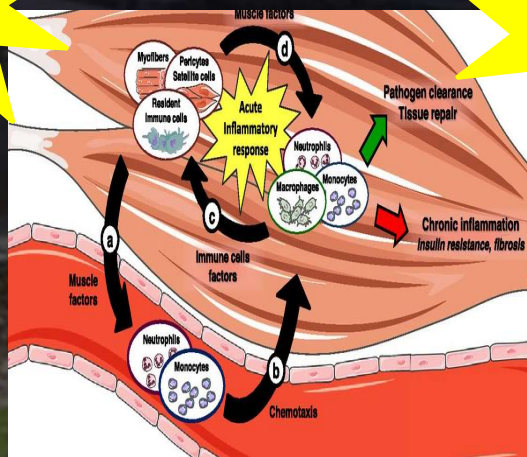
Total Running Volume



Training Adaptation



EIMD



Repair

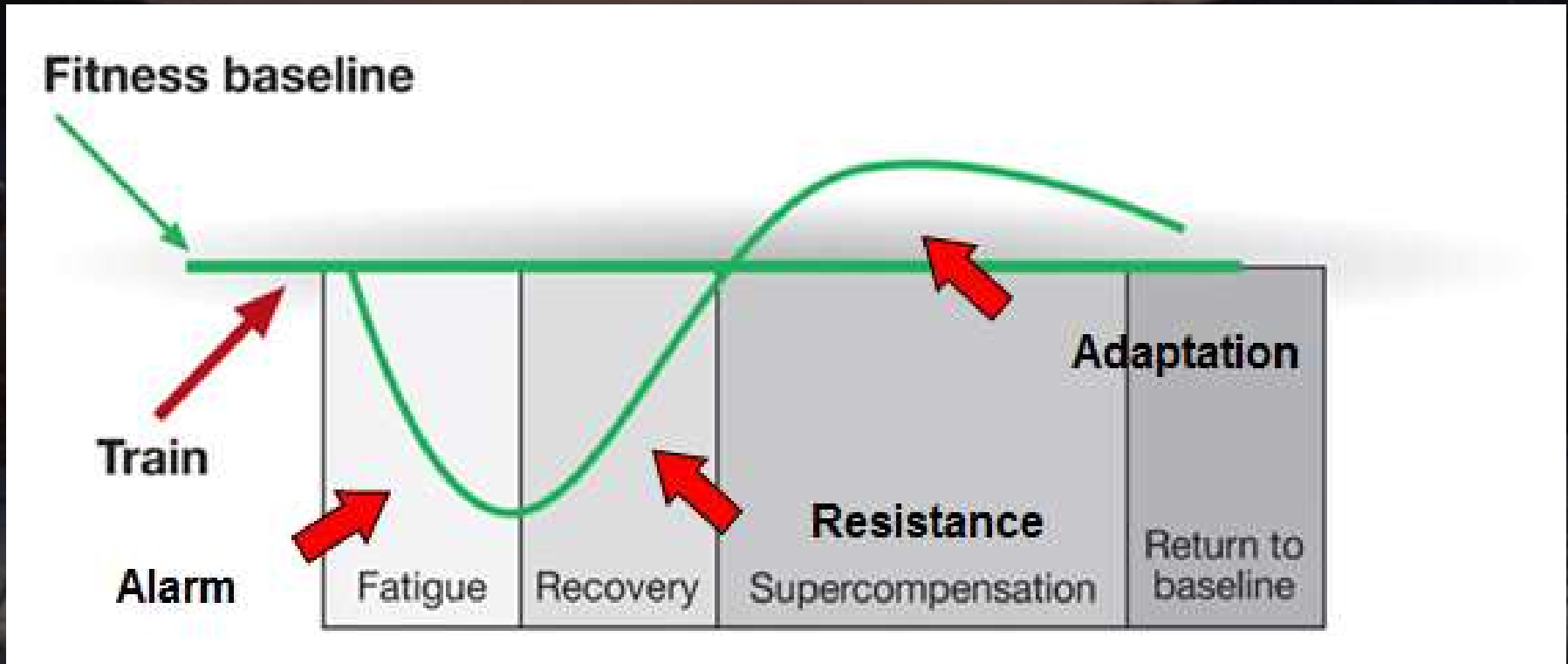
Adaptation



Inflammation

HURRICANES

How Recovery Works



	Monday 3-Dec																																								
	7:30am	7:45am	8am	8:15am	8:30am	8:45am	9am	9:15am	9:30am	9:45am	10am	10:15am	10:30am	10:45am	11am	11:15am	11:30am	11:45am	12pm	12:15pm	12:30pm	12:45pm	1pm	1:15pm	1:30pm	1:45pm	2pm	2:15pm	2:30pm	2:45pm	3pm	3:15pm	3:30pm	3:45pm	4pm	4:15pm	4:30pm	4:45pm	5pm		
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Loose Forwards																																									
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Load management

Schoolboy rugby often involves a high mental & physical loads

Example Tuesday

6:30-8am	9-3pm	4-6pm	6-8pm	8-9pm	10pm
BREAKY + PACK FOOD	SCHOOL	PREP	Dinner	STUDY	Sleep! Aim for >8hrs
PREP GYM SESSION (recovery snack)	NB: Stay hydrated Healthy Snacks Healthy Lunch	TRAINING	Hydrate	Evening Snack	
		RECOVERY			

	Recovery
	Mentally demanding/moderate physical demands
	Very physically demanding





THE ROAD TO RECOVERY

TARGET >100 POINTS

GAME:

>100 POINTS

RECOVERY DAY:

>100 POINTS

HIGH INTENSITY AND/OR CONTACT SESSION:

>100 POINTS

RESISTANCE TRAINING/TEAM RUN:

>60 POINTS

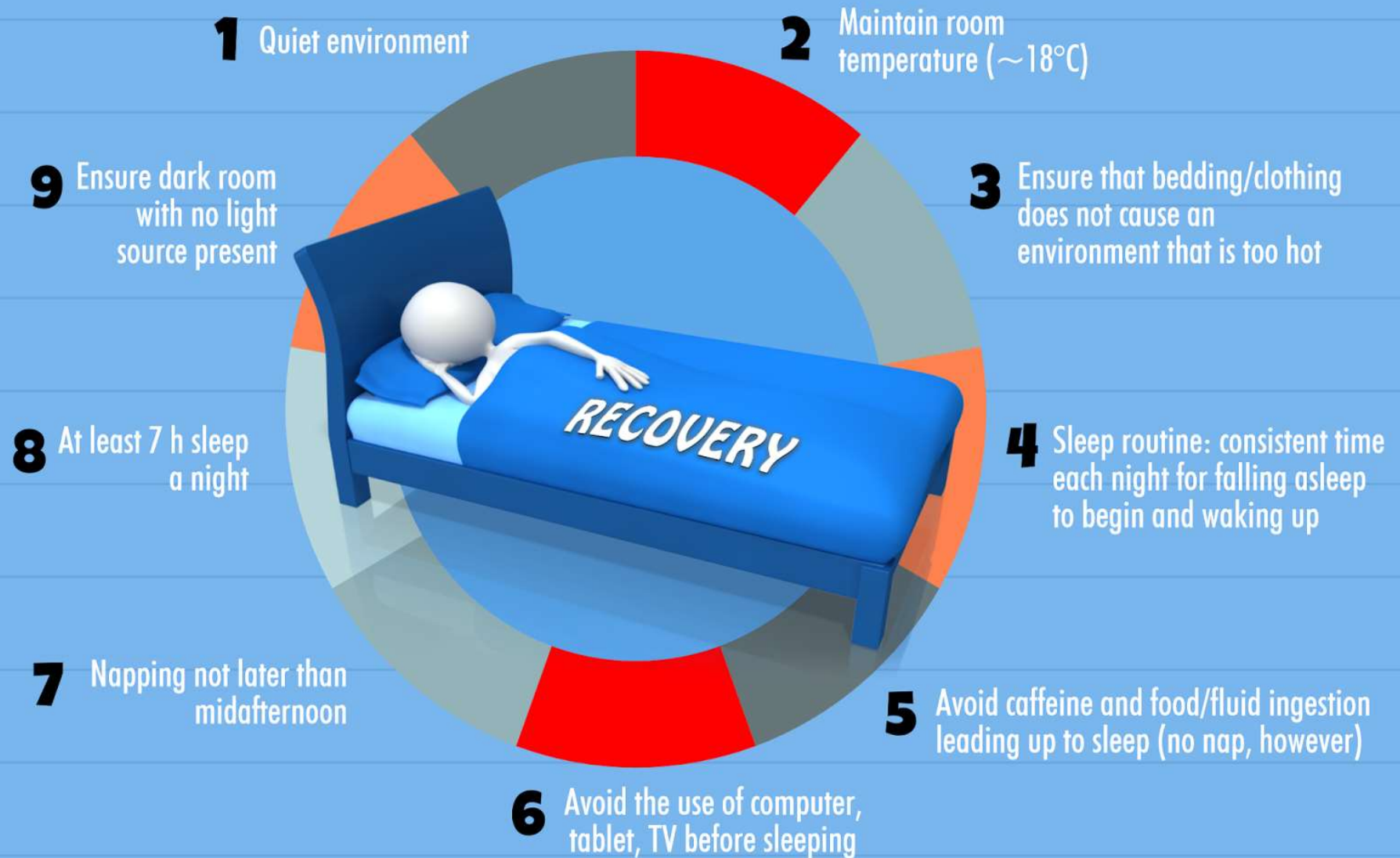
SPEED/LIGHT UNITS:

>40 POINTS

***COMPULSORY:**

>8 HOURS SLEEP PER NIGHT

WHAT	WHEN	POINTS
 NUTRITION/HYDRATION	1. EAT EVERY 3-4 HOURS 2. WITHIN 45MINS OF EXERCISE 3. PISS TEST <20	50
 HYDROTHERAPY	ANYTIME *PICK ONE 1. ICE BATH (5-15MINS) 2. HOT/COLD (20SEC/60SEC X4-5) *NOT POST CONTACT 3. POOL RECOVERY (20-30MINS)	40
 SPORTS MASSAGE	ANYTIME >30 MINS BY A SPECIALIST	40
 ACTIVE RECOVERY (20MIN)	ANYTIME *OFF FEET IS IDEAL WITH INTENSITY BEING LOW. OPTIONS INCLUDE BIKE, ROW, SURF, JOG/WALK.	30
 FOAM ROLL/TRIGGER POINT	ANYTIME *10-15MINS OF FOAM ROLLING AND STATIC STRETCHES. *15MINS NORMATEC	30
 COMPRESSION GARMENT	POST EXERCISE >2HRS POST EXERCISE, WHEN TRAVELLING OR >8HRS DURING SLEEP.	20



Reference: by Marshall & Turner, Strength Cond J, 2016

Designed by @YLMSSportScience

Injury Management

R = REST (prevent further damage)

I = ICE (reduces pain/bleeding 20mins every 2hrs for 78hrs)

C= COMPRESSION (Reduce swelling/bleeding)

E= ELEVATION (Reduce swelling/bleeding)

R= REFERRAL (See a qualified medical professional)



RETURN TO PLAY

Return to play is governed by:

- Type of injury/ diagnosis
- A rehab protocol which is monitored by your team physio and must be completed before cleared to:
 - Firstly, train with the team
 - Secondly, play (If able to train symptom free)

Note: Regular liaising between the medical staff, coaches, and parents is required so that there is a plan in place to help optimise return from injury



Prep to Play (Dane Coles)

- **Night before** - Load on carbs, usually have spag bowl, with a salad or vegs, and some fruit for desert.
- Stretch and trigger point 20 / 30 mins after dinner.
- **8/ 8 30 Breakfast** - 2 poached eggs and can of bake beans on 2 brown toast or half a cup of rolled oats with 1 cup of milk, 1 egg, scoop of protein, banana and almonds.
- **After breakfast** - get my game day bag ready, right down in my book key points for game, etc. set piece, defence, attack, mental triggers to help me during the game.
 - Will look at notes a couple of times during the day.



Prep to Play (Dane Coles)

- **Lunchtime** - Will chill in bed, usually eat a sandwich and fruit, pretty light at lunch.
 - Thru out the day will be consuming water
- **2 30** – Team walk thru (primer), will stretch and trigger point before that, warm up, do some throws before live lineouts.
- **3 30** - Pre match meal: powerade, 2 eggs, mash potato, chicken and pasta & some fruit.
- 30 mins in a normatec to flush the legs.
- Have a sleep from 4 - 5.
- **Get ready at 5**, go thru my key points I've written down in my book Stretch and trigger then game time. Listen to music too



TAKE HOME MESSAGES

- Lay big foundations (aerobic fitness, body composition, movement competency)
- Resistance training improves performance and reduces injury when done properly
- Food first
- Encourage your kids to be organized (preparation before sessions, plan recovery, sleep)
- See a qualified medical professional if injured



Questions

